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## S. F. Bay Area National Parks Fire Management

### Fire Education Internship Increases Understanding of Community Fire Hazards

During the summer of 2007, a 9-week internship in fire education was completed by a student from Sonoma State University, through a cooperative agreement with the National Park Service. The internship focused on the problem of pine pitch canker which has infected trees in neighborhoods surrounding Point Reyes National Seashore and Golden Gate National Recreation Area. The number of dead pines associated with the infection has been a growing concern for fire departments throughout Marin County. Many of the infected trees are non-native Monterey pines which were planted in residential areas. Removing these trees is a high priority in the county's Community Wildfire Protection Plan.

The internship fulfilled a degree requirement in Communications Studies for the intern, Marissa Spata, who is also minoring in Environmental Studies and Planning. During the internship, Marissa developed an educational site bulletin and maps of infected trees in communities near park lands.



The site bulletin summarizes the history of Monterey pine, describes the pine pitch canker pathogen and explains the fire hazard associated with it.

To develop the maps, Marissa met with the Stinson Beach and Bolinas Fire Chiefs, and visited areas where they had identified infected trees. GPS coordinates and photographs of infected trees were taken at 16 locations in Stinson Beach and 20 locations in Bolinas. Almost all of these sites have more than one infected tree, and many sites have more than five. The dead, dry branches within the infected trees are extremely flammable. These trees are typically within 100 feet from a structure and often within the first 30 feet, causing them to obstruct the critical defensible space needed to protect the

structure from wildfire.

The site bulletin and the maps of infected trees will be used in planning future community fire protection projects. The experience of working with local fire departments and land management agencies provided through this internship will also be useful as Marissa works toward the goal of earning a Masters in City Planning at San Diego State University.

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